



FEMA

Safe and Sound Above the Storm Surge

Pensacola, FL - When Hurricane Ivan struck Florida's Panhandle in September 2004 with 130-mph winds and storm surge of more than 13 feet, many bayside homes in Milton sustained substantial damage, but the home of Pat and David Rosser was relatively unharmed.

The Rossers' home is located in a V-Zone within a Special Flood Hazard Area, as designated by the National Flood Insurance Program. V-Zones are coastal areas subject to the additional hazard associated with storm-induced velocity wave action. The house was built on wood pilings and installed with hurricane-resistant windows, doors, and shutters. The bottom of the main floor beams were elevated to 12 feet 6 inches above mean sea level, which is 18 inches above the Base Flood Elevation (BFE), the average floodwater depth for a flood event that has an estimated one percent chance of occurring during any given year.

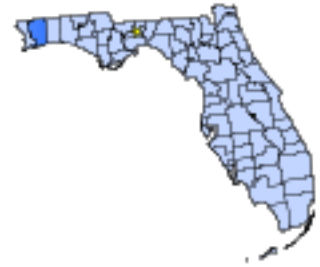
The Rossers evacuated during the storm and returned to find their home high and dry, although their property was littered with debris. Ivan's storm surge had rushed through walls and windows, carrying away household belongings. The area beneath the Rossers' house was crammed with a variety of debris, such as clothing, television sets, and chairs, and two boats had landed in their front yard.

The wooden deck, designed to break away, was gone. Most of the breakaway lattice enclosing the five-foot crawl space below the house was also dismantled by storm surge. Storm surge knocked out the doors of their detached garage. Several beloved oak trees were uprooted and toppled in the front yard, but the house itself remained dry and livable.

The Rossers made a wise decision to build their home to exceed code requirements. Elevating the house to 18 inches above the BFE prevented it from being destroyed by the forceful storm surge. The wave action had pushed through the space under the house, but none of the first-floor contents were touched by the water. "It would have cost us at least \$175,000 to make the repairs had our home flooded," said Pat Rosser. The Rossers estimated that the shutters and hurricane-resistant windows and doors added \$17,000 to the construction costs, but they feel that the protection against wind, rain, and flying debris was well worth it.

In a neighborhood devastated by Hurricane Ivan, the Rossers' house was one of only a few livable houses left standing, and they offered it as shelter to neighbors who could not stay in their own homes. Pat Rosser spoke of how she and her husband fed volunteers and neighbors during clean-up after the hurricane: "We and another house down the street became the only ones with normalcy. We made sandwiches for everyone, had potluck dinners here and fed 23 people at a time for about two weeks."

When Hurricane Dennis hit in August 2005, the only damage to the house was from wind, which loosened some courses of vinyl siding. This storm proved again that the extra effort put into the construction of the Rossers' house was worth it.



**Santa Rosa County,
Florida**



Quick Facts

Sector:

Private

Cost:

\$17,000.00 (Actual)

Primary Activity/Project:

Building Codes

Primary Funding:

Private funds